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IMMERSON -THELEN REID BROWN RAYSMAN & STEINER LLP			CRAIG, DWIN M	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Office Action Summary</b></p>	<p>Application No.</p> <p align="center">10/801,643</p>	<p>Applicant(s)</p> <p align="center">KRAMER ET AL.</p>	
	<p>Examiner</p> <p align="center">Dwin M. Craig</p>	<p>Art Unit</p> <p align="center">2123</p>	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 November 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12 and 13 is/are allowed.
- 6) ☒ Claim(s) 9, 10, 14-19 and 22 is/are rejected.
- 7) ☒ Claim(s) 11, 20 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/1/2007 has been entered.
2. Claims 9-22 have been presented for reconsideration based on Applicants' request for Continued Examination under 37 CFR 1.114, arguments and amended claim language.

### *Response to Arguments*

3. Applicants' arguments presented in the 11/1/2007 responses have been fully considered; the Examiner's response is as follows;
  - 3.1 The Examiner thanks the Applicants' for amending claims 13 and 14 and hereby withdraws the objections to the same.
  - 3.2 Regarding Applicants' arguments presented on pages 9-11 of the 11/1/2007 responses and further and in regards to priority and in regards to the 35 U.S.C. 112 First Paragraph rejection of claims 10-13, 20 and 21. Applicants' argued:

With respect to the "*simulated hand*" or "*second simulated hand and/or multi-articulated structure*," attention is respectfully directed to for example FIG. 5 and the attendant discussion beginning on page 17, line 23, and to FIGS. 6A and 6B and the associated discussion beginning on page 19, line 5. These and other portions of the disclosure describe for example "two computer-simulated virtual hands," one of which "is a graphical hand [602, FIG. 6B] which is rendered, and the other is a 'ghost' hand [600, FIG. 6A], which is not displayed, but given the measurements of the hand reproduces as precisely as possible the movements of the physical

hand."<sup>1</sup> (Emphasis added). The term "multi-articulated structure" is a generic term for a hand, a human figure (FIG. 9 and associated discussion, a generic mechanical structure (FIG. 10 and associated discussion) and "other body parts and graphical inanimate objects."<sup>2</sup> The term "multi-articulated structure" is used for example in the Summary of the Invention (see page 5, 11.8-9, and 1.22), and a multi-articulated spring model simulation is described as being used to model a hand, in page [19-20] *sic*.

The Examiner thanks the Applicants' for providing clarification as to what constitutes the *second simulated hand*, clearly the second *virtual hand* is the *shadow hand* as argued by the Applicants' and disclosed in Abandoned application 09/432,362 in figures 3 and Figures 8 A-F, therefore in view of Applicants' arguments the previously applied 35 U.S.C. 112 first paragraph rejections of claims 10-13, 20 and 21 are hereby withdrawn. Further and in regards to the 35 U.S.C. 103(a) rejections of claims 10-13 and 17-21 the Examiner notes that Applicants' can now properly claim priority to abandoned Application to a Filing Date of 11/3/1999 and therefore the date of making the invention now is at or before 11/3/1999 which makes U.S. Patent 6,104,379 to *Petrich et al.* a reference under 35 U.S.C. 102(e) and because this reference is being used in a 35 U.S.C. 103(a) rejection the reference is hereby excluded under the 35 U.S.C. 103(c) exclusion as to allowable prior art rejections, therefore the rejections to claims 10-13 and 17-21 are hereby withdrawn as well.

**3.3** Regarding Applicants' arguments on pages 11-13 regarding the 35 U.S.C. 103(a) rejections of claims 9, 14, 15, 16 and 22, Applicants' argued;

The passage cited in the Office Action relating to "a graphical representation or abstraction of the user contact apparatus and its location relative to the virtual environment" (Massie, col. 23, 11.27-33) is unclear, since the specific term "user contact apparatus" is not defined in Massie, and, if taken to mean the whole mechanical contraption depicted in for example FIGS 1-4, is not enabled and accordingly fails to provide a proper basis for a 35 U.S.C. § 103(a) obviousness rejection

The Examiner respectfully traverses Applicants' arguments, the Examiner has interpreted Applicants' argument to be that because *Massie* fails to teach, make obvious or have enablement for an *apparatus* that the currently applied rejection is improper. Further and in regards Applicants' arguments, *Massie* is allegedly deficient because the reference further fails to teach a "user contact apparatus". The Examiner points to Figure 1 of *Massie*, clearly this is a teaching of an *apparatus* further and in regards to *Massie* teaching "user contact apparatus" figure 2A shows a users finger making contact with said *apparatus*, therefore the Examiner respectfully submits that *Massie* is both enabled as a teaching of a "user contact apparatus", see also Figure 11.

On page 12 of the 11/1/2007 responses Applicants' further argued;

Moreover, *Massie* does not show a data processor which modifies digitized signals associated with the configuration and spatial placement of a physical multi-articulated structure to generate a set of modified signals specifying the configuration and spatial placement of a simulated multi-articulated structure such that when the simulated multi-articulated structure encounters a simulated impediment, the configuration and spatial placement of the simulated multi-articulated structure is in part determined by constraints causing the simulated multi-articulated structure to flex. As discussed above, "configuration" in the manner used in the present description, which is consistent with the ordinary and accustomed meaning of that term, is not a concern of *Massie*. Only the end point position, in the master environment and in the mapped slave environment, is of concern in *Massie*. Thus none of these claimed limitations are met by *Massie*.

The Examiner respectfully traverses Applicants' argument, *Massie* does teach *configuration* see Col. 30 lines 9-19, more specifically, "...Using the invention allows the user to actually feel the *configuration* (*emphasis added*) of the data in a virtual three dimensional space..." therefore configuration of the apparatus has been disclosed and suggested in *Massie*. Further and in regards to the argument concerning the teaching of a *flexing*, and the use of a *processor*, *Massie* teaches, Col. 29 lines 1-61 clearly describes the apparatus of *Massie* being

used as an input device to a computer for the purpose of manipulating a virtual environment which *requires* the use of a processor. Further and in regards to the teaching of a *flexing* in order to simulate tactile feedback, this is clearly disclosed in *Massie* see the previously applied prior art rejections more specifically, (Col. 23 lines 51-54 "Thus, the further the point is "beyond" the virtual wall, the greater will be the resisting force..." and Col. 15 lines 12-26, generating resisting force is functionally equivalent to a "flex"). *Massie* further discloses the suggestion for performing a *flex* of force to provide tactile feedback, see Col. 30 lines 9-19, more specifically, "Data spanning more than three dimensions can be displayed to the tactile senses by having additional dimensions displayed to the tactile senses by having additional, dimensions represented by texture, motion etc." While this teaching discloses a *visual* form of tactile feedback it does disclose that there is a suggestion to provide tactile feedback from a virtual world to the real world.

It is for these reasons that the previously applied prior art rejections of claims 9, 14, 15, 16 and 22 will be maintained.

***Priority***

3. After careful review of Applicants' arguments set forth in the 11/1/2007 responses and a review of the subject matter set forth in Abandoned case S/N 09/432,362 the Examiner acknowledges Applicants' priority to the filing date 11/3/1999. It is noted by the Examiner that under the 35 U.S.C. 103(c) requirement that the use of U.S. Patent 6,104,379 to *Petrich et al.* is now invalid and that rejection has been withdrawn.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 9, 14, 15, 16 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,625,576 to Massie.

4.1 Regarding claim 9, Massie teaches, *a system for moving a simulated-multi-articulated structure in relation to the movement of an analogous physical-multi-articulated structure* (Figure(s) 1, 2A & 11 and the descriptive text and Col. 4 lines 9-28 and Col. 23 lines 27-33 “a graphical representation or abstraction of the user contact apparatus and its **location relative to the virtual environment...**” a virtual environment is functionally the same as a simulated environment),

*where said simulated-multi-articulated structure moves in a simulated environment* (a virtual environment is functionally equivalent to a simulated environment, see Col. 2 lines 27-30 more specifically “...control **virtual** machines and **environments...**” and Col. 8 lines 22-33 and Col. 22 lines 54-67 “...user interface with a **virtual environment...**” as regards the moving of the simulated articulated structure see, Col. 25 lines 1-16 more specifically “These necessary changes are calculated at **1320**, and the record or image or representation of the virtual environment is changed accordingly. If a display is being used, the present state of the virtual environment and the user reference point is displayed **1322.**”),

*comprising a simulated impediment to free motion* (Col. 3 lines 13-33 “...**virtual object...**” and Col. 15 lines 27-38 “illusion of a **solid** wall...” and Col. 23 lines 50-59 “...the further the point is “beyond” the virtual wall, the greater will be the resisting force. Common experience is that very hard walls do not admit of any intrusion beyond the rest plane”),

*where said physical-multi-articulated structure moves in an environment lacking an analogous physical impediment* (Col. 2 lines 27-31 “...which are **not** physical, but rather are “embodied” or reside in a computer model...” see also Col. 15 lines 12-25 and Col. 15 line 38 “illusion of a solid wall.”),



*said system comprising: a device for measuring the configuration of said physical-multi-articulated structure* (Figure 5 and the descriptive text more specifically, references # 550, 562, 570 & 580 and Col. 10 lines 44-53 and Col. 12 lines 60-67 and Col. 13 lines 1-13 "...keep track of the user's position with respect to that freedom..." and Col. 23 lines 12-64 and Col. 22 lines 24-34 and Col. 20 lines 54-67 and Col. 21 lines 1-12),

*and the spatial placement of said physical-multi-articulated structure relative to an inertial reference frame and providing digitized signals associated with the configuration and spatial placement;*(Figure(s) 12 & 13 references # 1236 & 1312, 1314, 1316, 1318, 1320 and more specifically, Col. 7 lines 57-62 and Col. 10 lines 44-53 and Col. 24 lines 6-25),

*and a data processor* (Figure 12 # 1236), *comprising data related to the spatial placement of said simulated impediment and constraints of said simulated impediment and said simulated-multi-articulated structure, for receiving said digitized signals* (the examiner notes that signals are being generated by the different elements in Figure 5, 12 and 13 and more specifically in figure 5 signals between blocks #502, 500, 506, 536, 540, 550, 564, 560, 566, 550, 562, 574, 572, 570, 580 and going to Figure 13 signals between blocks #1312, 1314, 1316, 1318, 1320, 1322 and 1324 and see the descriptive text concerning these items and figures) *and modifying said digitized signals using said data to generate a set of modified signals specifying the configuration and spatial placement of said simulated-multi-articulated structure,* (Col. 24 lines 6-25, more specifically, "The force signal also passes to a virtual environment reaction calculator **1236**, which determines if ant changes should be made to the geometrical representation of the virtual environment" and regarding spatial placement see Col. 24 lines 43-65 "...a method of generating a force feedback signal based on making the comparisons between

the physical location of the user connected reference point and the virtual environment” and “...location of the user reference point is related **1314** to the geometry...”),

*such that when said simulated-multi-articulated structure encounters said simulated impediment, the configuration and spatial placement of said simulated-multi-articulated structure is in part determined by the constraints causing said simulated-multi-articulated structure to flex* (Col. 23 lines 51-54 “Thus, the further the point is “beyond” the virtual wall, the greater will be the **resisting force**...” and Col. 15 lines 12-26, generating resisting force is functionally equivalent to a “*flex*”).

While the cited reference does not use the exact same terminology as Applicant’s claims, it would be obvious to an artisan of ordinary skill in the art, at the time of the invention was made, to have taken the teachings of Massie and derive the specific limitations as disclosed in Applicant’s claim language.

4.2 Regarding claim 14 see the rejection of claim 9 above.

4.3 Regarding claim 15 see the rejection of claim 9 above.

4.4 Regarding claim 16 see the rejection of claim 9 above.

4.5 Regarding claim 22 see the rejection of claim 9 above.

5. Claims 10 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,625,576 to Massie in view of U.S. Patent 5,280,265 to Kramer et al.

5.1 Regarding independent claims 10 and 17 and using independent claim 10 as an example, Massie teaches, *a system for moving a simulated hand in relation to the movement of a physical*

*hand* (Figure(s) 1, 2A & 11 and the descriptive text and Col. 4 lines 9-28 and Col. 23 lines 27-33 “a graphical representation or abstraction of the user contact apparatus and its **location relative to the virtual environment...**” a virtual environment is functionally the same as a simulated environment),

*where said simulated hand moves in a simulated environment comprising a simulated impediment to free motion* (Col. 3 lines 13-33 “...**virtual object...**” and Col. 15 lines 27-38 “illusion of a **solid** wall...” and Col. 23 lines 50-59 “...the further the point is “beyond” the virtual wall, the greater will be the resisting force. Common experience is that very hard walls do not admit of any intrusion beyond the rest plane”),

*where said physical hand moves in an environment lacking an analogous physical impediment* (Col. 3 lines 13-33 “...**virtual object...**” and Col. 15 lines 27-38 “illusion of a **solid** wall...” and Col. 23 lines 50-59 “...the further the point is “beyond” the virtual wall, the greater will be the resisting force. Common experience is that very hard walls do not admit of any intrusion beyond the rest plane”),

*said system comprising: a device for measuring the configuration of said physical hand and the spatial placement of said physical hand relative to an inertial reference frame and providing digitized signals associated with the configuration and spatial placement* (Col. 24 lines 6-25, more specifically, “The force signal also passes to a virtual environment reaction calculator **1236**, which determines if ant changes should be made to the geometrical representation of the virtual environment” and regarding spatial placement see Col. 24 lines 43-65 “...a method of generating a force feedback signal based on making the comparisons between

the physical location of the user connected reference point and the virtual environment” and “...location of the user reference point is related **1314** to the geometry...”);

*and a data processor, (Figure 12 # 1236) comprising data related to the spatial placement of said simulated impediment and constraints of said simulated impediment and said simulated hand, for receiving said digitized signals and modifying said digitized signals using said data to generate a set of modified signals specifying the configuration and spatial placement of said simulated hand* (the examiner notes that signals are being generated by the different elements in Figure 5, 12 and 13 and more specifically in figure 5 signals between blocks #502, 500, 506, 536, 540, 550, 564, 560, 566, 550, 562, 574, 572, 570, 580 and going to Figure 13 signals between blocks #1312, 1314, 1316, 1318, 1320, 1322 and 1324 and see the descriptive text concerning these items and figures), *such that when said simulated hand encounters said simulated impediment, the configuration and spatial placement of said simulated hand is in part determined by the constraints* (Col. 24 lines 6-25, more specifically, “The force signal also passes to a virtual environment reaction calculator **1236**, which determines if ant changes should be made to the geometrical representation of the virtual environment” and regarding spatial placement see Col. 24 lines 43-65 “...a method of generating a force feedback signal based on making the comparisons between the physical location of the user connected reference point and the virtual environment” and “...location of the user reference point is related **1314** to the geometry...”)*causing said simulated hand to flex* (Col. 23 lines 51-54 “Thus, the further the point is “beyond” the virtual wall, the greater will be the **resisting force**...” and Col. 15 lines 12-26, generating resisting force is functionally equivalent to a “flex”).

However, Massie does not expressly disclose a “simulated hand”.

Kramer et al. teaches a simulated hand, (Figure 16B ).

Massie and Kramer et al. are analogous art because they are both from the same field of endeavor of creating a virtual reality using a computer system and a multi-articulated input device.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to present a user with a visual representation of a hand or simulated hand as disclosed by Kramer et al. when using the multi-articulated structure as disclosed in Massie.

The suggestion for doing so would have been to provide "a low-profile, high resolution goniometer which is easily and unobtrusively mounted to a surface to monitor angles between two or more moveable structures associated with that surface...The output of such a goniometer may be used to control the movement of computer generated objects or figures on a computer monitor..." see *Kramer et al.* Col. 1 lines 42-53.

Therefore, it would have been obvious to combine Kramer et al. with Massie to obtain the invention in claim 10.

**5.2** Regarding claim 18, *Massie* does not expressly teach goniometers however, Kramer et al teaches wherein said sensor includes a goniometer configured to determine at least one angle of a joint of the multi-articulated structure (Figure 30B and the descriptive text).

**5.3** Regarding claim 19, *Massie* does not expressly disclose wherein said sensor includes a tracking device configured to determine the spatial placement of the multi-articulated structure relative to the inertial reference frame, however, *Kramer et al.* teaches, (Figure 16B and Col. 1 lines 25-53).

*Allowable Subject Matter*

6. Claims 11, 20 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

While *Massie* teaches a multi-articulated structure that flexes when coming into contact with a virtual object and *Kramer et al.* teaches the use of a Goniometer, **none of these references taken alone or in combination with the prior art of record disclose**, (claim 11) a simulated spring, (claim 20) a second simulated multi-articulated structure, (claim 21) the first simulated multi-articulated structure is being superimposed on the second simulated multi-articulated structure, specifically including:

(Claim 11) "...said data processor producing modified signals from said digitized measured signals and said constraints using a simulated spring attached between first and second simulated hands, where angles and placement, of said first simulated hand uses said digitized measured signals and angles and placement of said second simulated hand uses said modified signals and said first and second simulated hands are superimposed in the absence of said second simulated hand encountering said simulated impediment...",

(claim 20) "...and the spatial placement of the multi-articulated structure is further configured to generate a second set of modified signals specifying data values associated with a configuration and a spatial placement of a second simulated multi-articulated structure...",

(claim 21) "...the first multi-articulated structure being superimposed on the second simulated multi-articulated structure, wherein when simulated interaction occurs between the

simulated multi-articulated structure and the simulated object, the first simulated multi-articulated structure is separated from the second multi-articulated structure...”, **In combination with the remaining elements and features of the claimed in invention.**

**6.2** Claims 12 and 13 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:  
While *Massie* teaches a multi-articulated structure that flexes when coming into contact with a virtual object and *Kramer et al.* teaches the use of a Goniometer, **none of these references taken alone or in combination with the prior art of record disclose**, a simulated spring between two simulated structures, specifically including:

(claim 12) “...a simulated spring mass dashpot attached between the first and second simulated hands, where the angles and placement of said first simulated hand uses said digitized measured signals and the angles and placement of the second simulated hand uses said modified signals and said first and second simulated hands are superimposed in the absence of said second simulated hand encountering said simulated graphical impediment, such that when said second simulated hand encounters said simulated graphical impediment, said second simulated hand is flexed and displaced from said first simulated hand and realigns with said first simulated hand when said simulated graphical impediment is removed at a rate regulated by said spring dashpot...”,

(claim 13) “... a simulated spring attached between the first and second simulated hands, where the angles and placement of said first simulated hand uses said digitized measured signals and the angles and placement of said second simulated hand uses said modified signals and said first and second simulated hands are superimposed in the absence of said second simulated hand

encountering said simulated impediment; such that when said second simulated hand encounters said simulated graphical impediment, said second simulated hand is flexed and displaced from said first simulated hand and when said simulated graphical impediment is removed, becomes superimposed with said first simulated hand at a rate in proportion to the movement of said first simulated hand, said second simulated hand being depicted graphically as said simulated graphical hand.", **in combination with the remaining elements and features of the claimed invention.** It is for these reasons that the Applicants' invention defines over the prior art of record.

### *Conclusion*

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwin M. Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul L. Rodriguez can be reached on (571) 272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

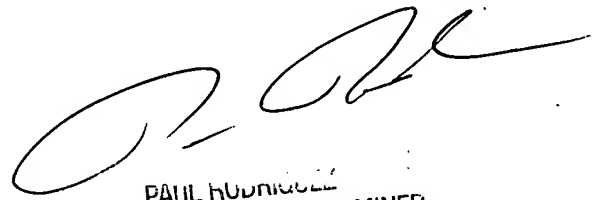


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